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ABSTRACT

This study sought to examine the community college and university experiences of students who differed by racial/ethnic background. C. R. Pace's concept of Quality of Effort was employed to frame questions regarding level of involvement, quality of effort, general perceptions and the academic and social adjustment process. The research design utilized the Transfer Student Questionnaire (TSQ) and captured a sample of 696 students. Descriptive and factor analyses as well as tests of significance were employed in the data analysis. Results suggest that non-white students are likely to have different experiences at both the two- and four-year institutions than white students in terms of quality of effort, perceptions of the environment, and educational background. White students reported a significantly higher quality of effort with regard to faculty and course learning. Whites also performed better than non-white students as measured by GPA. However, a significantly higher number of non-whites than whites were first-generation college students. Implications for future practice are discussed. Survey results are appended. Contains 37 references. (SKF)

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Any Differences? Comparative Analysis of White and Non-White Transfer Students at a University

Paper presented at the
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ABSTRACT

This study sought to address the following research question: How do students differ in their community college and university experiences by racial/ethnic background? Specifically, to what extent are there statistically significant racial/ethnic differences in terms of level of involvement, quality of effort, general perceptions, and academic and social adjustment process among white and non-white students. Pace's concept of Quality of Effort was employed as the guiding theoretical framework. The sample included 696 students (330 non-white and 336 white students). The intent of this study was to move beyond the "transfer shock" concept by building on previous works in an effort to establish new methods, concepts, and frameworks to better understand and characterize the complex transfer process of community college students at the university.

INTRODUCTION

The nation's 1,100 community colleges educate a diverse population in terms of cultural and ethnic backgrounds and social demographics. Among minorities, community colleges are the schools of choice (American Association for Community College, 1997). Almost 50% of all minority undergraduates enroll each fall in higher education. Because of their flexible schedules and diverse curriculum, this segment attracts students with different needs.

In the last decade, research on non-white (or minority) students has emerged as a popular research paradigm. Given the changing student demographics at two- and four-year institutions, questions about non-white students' progress and educational outcomes have received immediate attention. Recently, studies have examined specific racial/ethnic groups and explored their academic and social adjustment experiences at the four-year institution (Allen, 1985, 1988; Hurtado et al., 1996; Olivas, 1986; Justiz & Rendon, 1989). A popular framework in understanding students' adjustment to college has been examined using retention and persistence models. According to Eimers and Pike (1997), majority of the empirical research on undergraduate retention for both minority and non-minority students has relied upon theoretical perspectives advanced by Tinto (1975, 1986), Bean (1980, 1982, 1983), and Cabrera and Nora (1994). According to Tinto (1975), persistence in college is a function of social and academic integration. That is, high levels of integration in both spheres will likely lead to commitment, which will eventually lead to persistence. Another framework for understanding the adjustment experiences of minority students is the notion of the poor fit between particular groups and the institutional environment (Mow & Nettles, 1990). The authors maintain that poor fit is usually not realized until after the students arrive on campus.

For students who begin their postsecondary education at a two-year college and transfer to a four-year college or university, most studies have explained their adjustment process as "transfer shock" (Cejda, 1994; Diaz, 1992; Graham & Hughes, 1994; Hill, 1965; Keeley & House, 1993; Laanan, 1996). These studies found that transfer students tend to experience a temporary dip in grades during their first or second semester after transferring to a senior institution. The majority of the research in this area focuses on the differences between native (those who entered as a freshman) and transfer students' academic achievement as measured by traditional GPA (Best & Gehring, 1993; Graham & Hughes, 1994). Considered to be a popular paradigm in the research literature, the transfer shock concept only describes the cognitive outcome (or GPA) of transfer students' academic adjustment at the four-year institution (Laanan, 1996, 1998). Because of the growing number of minority students attending postsecondary education, research that focuses on their affective outcomes is warranted. Further, by examining new constructs to measure these complex dimensions, the goal of this study is to fill a void in the literature about the experiences of students at the two- and four-year environments by racial/ethnic background.

LITERATURE REVIEW

Research on Racial/Ethnic Background

Recently, studies have examined specific racial/ethnic groups and explored their academic and social experiences at the four-year institution. For African American students, studies have examined students attending predominantly white institutions to address issues of isolation and alienation. Allen (1981, 1985, 1988) has shown that African American students on

white campuses are often not prepared for the actual experiences they encounter; thus, they face more isolation and alienation, as well as dissatisfaction, as compared to white students.

Similarly, Madrazo-Peterson and Rodriguez (1978) also found that Native Americans and Latino students also experience isolation and alienation. As opposed to white students, Chicano students face more adjustment problems and stress, and perceive themselves to be less prepared academically (Munoz, 1986). Justiz and Rendon (1989) maintain that students' low socioeconomic status, poor understanding of the higher education system, language problems, inadequate academic preparation, and lack of congruence between expectations and experiences, are factors that may exacerbate students' adjustment problems. Similarly, Olivas (1986) posits that "marginality" - not being involved in mainstream activities is a primary factor negatively affecting Latino student persistence. He found that Chicano students are less likely to assimilate into an institution and generally do not become involved with mainstream activities, thus accentuating their feelings of marginality and leading to lowered expectations and performance.

Although there have been numerous research studies on African American and Latino students, few studies have examined the performance and persistence of Asian American students (Malaney & Shively, 1995). Mow and Nettles (1990) maintain that because studies have shown that Asian Americans have higher rates of access, persistence, and performance than other minority groups, the perceived need for research on this population is not as strong. Asian American students' grades and graduate rates tend to be higher than those of their white counterparts at some institutions. While this may be true, Asian Americans are still likely to suffer from problems of cultural adjustment and racism, especially on predominantly white campuses where their expectations may not match their experiences (Asamen & Berry, 1987;

Chew & Ogi, 1987; Loo & Rolison, 1986). Asian American students generally have lower English language proficiency and higher quantitative skills than white students. This may lead to the stereotyping and stigmatization of Asian Americans (Mow & Nettles, 1990).

CONCEPTUAL PERSPECTIVE

Quality of Effort

A conceptual perspective that is helpful for this study is Pace's (1980, 1984) concept of "Quality of Effort" (QE). Using the College and University Environment Scales (CUES), George Stern and C. Robert Pace are credited to have pioneered the concept of QE and its effects on various outcomes by examining the "environmental press" as a factor in student development. After 20 years of using the CUES, which focused on institutional accountability, Pace modified his environmental analysis to include student accountability. According to Pace (1992, p. 4), "accountability for achievement and related student outcomes must consider both what the institution offers and what the students do with those offerings." This conceptual perspective gave rise to the new measurement device called QE. The instruments prior to the QE focused on the environment, which attempted to evaluate the places where certain types of developmental activities transpired (e.g., classrooms, libraries, laboratories, student unions, etc.). Building from this premise, the purpose of the QE instrument was to measure student behavior within those settings to assess the level of effort and to correlate that effort with an outcome measure.

The underlying principle of the QE is that what a student gets out of college is dependent not only upon what the college does or does not do but also on the extent and quality of effort that the student puts into college. To assess students' level of involvement, Pace developed the

College Student Experiences Questionnaire (CSEQ). This instrument includes fourteen quality of effort scales that estimates a student's use of an institution's facilities and opportunities. These scales cover a broad range of student activities including library experiences, course learning, experiences in writing, the student union, experiences with faculty, topics of conversation, and personal experiences. For each scale, students are asked to report the *frequency* with which they did a variety of activities. The activities represent varying levels or qualities of experience that "reflects a unidimensional hierarchy, meaning they are interdependent, in the sense that engagement in the higher quality and most difficult activities subsumes engagement in the lower quality or easier activities (Pace, 1984, p. 11). The conceptual origins of the CSEQ derived from a variety of views and concepts about the nature of higher education, about accountability, about student learning and development, and about the need for new measures in the evaluation of higher education programs.

The concept of quality is based on two perspectives. First, education is both a process and a product. Typically, when educational programs are evaluated, the view has been to think of education as a product (e.g., knowledge acquisition, improvement of skills, attitudes and values modified, and personal traits developed). This rationale gave rise to Pace's notion that the quality of the educational experience or process should also be accounted for. That is, it is equally important to measure the quality of the process as well as the quality of the product. Second, all learning and development require an investment of time and effort by the student (1984, p. 5). *Time* is a frequency dimension, while *effort* is a quality dimension. Pace posits that quality of experience and quality of effort are similar concepts, connected with one another in that the likelihood of having high quality of effort depends on investing high quality of effort.

Application of Quality of Effort

Pace's QE framework enhances the understanding of student development. As applied to this study, it is important to consider the process by which students are involved or engaged in certain academic and social activities. Further, all learning and development requires an investment of time and effort by the students. For transfer students, the extent to which they are involved and spend quality time in various activities will impact outcomes that include satisfaction, involvement, and adjustment. This framework enables the researcher to measure students' use of campus facilities and opportunities provided by the college for their learning and development, thus, taking the responsibility from the institution and making students accountable for their actions. It is important, however, to take into account the unique environment of the community college and the extent to which it differs from a four-year university. This study seeks to identify if whether the amount, scope, and quality of students' effort is a key to identifying the quality of the educational process.

PURPOSE OF THE STUDY

The purpose of this study is to understand and describe the extent to which transfer students differ in their academic and college experiences by racial/ethnic background (i.e., white versus non-white). This study sought to address the following research question: *How do students differ in their community college and university experiences by racial/ethnic background? Specifically, to what extent are there statistically significant racial/ethnic differences in terms of level of involvement, quality of effort, general perceptions, and academic and social adjustment process among white and non-white transfer students?*

METHODOLOGY

Data Source

The target population for this study included 2,369 students who transferred in spring and fall 1994 and 1995 from California Community Colleges to a Research I University, located in Southern California. The population was identified from reports generated by the University registrar's office.

Survey Instrument and Response Rate

Data were collected using a survey instrument. The 304-item Transfer Students' Questionnaire (TSQ) (Laanan, 1998) was formulated as a result of extensive review of past survey instrument and previous studies in this area (Astin, 1993; Baker & Siryk, 1986; Pace, 1984, 1990, 1992). This study measured transfer students' non-cognitive or affective traits: attitudes, values, and interests in different areas. The survey instruments were mailed to students' home address during week three of fall quarter 1996. Students were given a deadline of three weeks from receipt to return the instrument. The instrument was accompanied by a cover letter from a University official encouraging students to participate in the study. To facilitate a high response rate, a complimentary Business Reply Envelope was provided. Subsequent follow-ups were conducted for students who did not respond to the initial mailing.

The TSQ is organized in three main sections: (1) social demographics; (2) community college experiences; and (3) University experiences. The social demographics component includes questions about transfer institution, high school GPA, age, racial/ethnic identification,

sex, hours working on a job during school, place of residence, educational attainment of parents, degree aspirations, and parental income level.

The community college component covered two broad areas: college experiences and college activities. Under this category, questions focused on areas such as hours spent on campus, class preparation, and working at a job for pay; GPA; degree attainment; and enrollment in honors courses. Questions also included students' experiences with courses, academic counseling, transfer process, and transfer center. The community college activity section probed students' quality of effort and involvement in course learning, experiences with faculty, clubs and organizations, and writing.

The University component covered two broad areas: university experiences and university activities. The University experiences covered items such as undergraduate major; GPA; reason for attending university. The university activity section included five broad areas: experiences with faculty, clubs and organizations, course learning, involvement activities, and academic counseling services. Statements about students' general perceptions, and adjustment process were also included.

A total of 727 students returned the completed questionnaire, and of these 10 questionnaires were not included in the data analysis due to insufficient information. The final sample comprised 717 students, which yielded a response rate of 30%. These students transferred from 64 California community colleges in 1994 and 1995.

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The Sample

The variable RACE was used to categorize students in two groups: white and non-white. The white sample included students who marked the "white/Caucasian" item on the survey instrument. Students who marked "Other" (n=21) under the racial/ethnic identification were excluded from the analysis. These students were excluded because it was impossible to code their ethnic identification with the choices provided.

The non-white sample was derived by collapsing the following racial/ethnic categories: African American, American Indian, Chinese, East Indian/Pakistani, Filipino, Japanese, Korean, Mexican American/Chicano, Other Spanish/Latino, Pacific Islander, and Vietnamese. These categories were collapsed because the numbers for each group were small. As a result, a between group analysis would yield very small sample sizes and create methodological problems in generalizing the findings. Also, in examining the mean responses for key items in the survey, the results showed that within the non-white group, students tended to respond similarly on the outcome measures of interest, compared to white students. The findings provided the rationale for establishing the comparison sample. For the racial/ethnic analysis, the final sample consisted of 330 (47%) non-white and 366 (53%) white students.

Method of Analysis

The data for this study were analyzed through various statistical methods. At the first stage, descriptive statistics were analyzed (e.g., frequencies, crosstabulations). At the second stage, exploratory factor analysis (EFA) was employed on the community college and four-year variables as a data reduction technique. The basic assumption of factor analysis is that

underlying dimensions, or factors, can be used to explain complex phenomena. Since factor analysis entails the creation of factors comprised of more than one variable, this allows for the researcher to better understand and explain transfer students on a number of complex dimensions.

The extraction technique used was principal components analysis. An orthogonal rotation, the varimax rotation was employed to make the factors more interpretable and to achieve a simple structure. Factor loadings of .45 or higher were kept in the analysis, and those lower were dropped. A total of 19 factors were created. The factors represent attitudes and behaviors that characterize transfer students on a number of dimensions. Nine factors emerged within the community college environment and 10 factors in the four-year environment. Appendix A.1 to A.19 provides a description of the variables that comprise the factors, alpha reliability coefficients, and respective factor loadings. Composite scores for each group (i.e., white and non-white) were calculated from the factors that emerged.

Reliability Measures. Reliability measures item consistency and the extent to which the item responses are consistent across constructs (Cresswell, 1994). The most widely used estimate of reliability, *internal consistency*, indicates the degree of homogeneity among the items in an instrument. Coefficient alphas were calculated for each factors. This method is used with instruments in which there is no right or wrong answer to each item. It is an appropriate type of reliability for attitude instruments and other measures that contain a range of possible answers for each item, such as degree-agree. Table 1 reports the reliability coefficients for the factors and the number of items that comprise each factor. Reliabilities for these factors range from .66 to

.94. Finally, a *t* test of independent samples was used to test the null hypothesis. For this study, statistical significance was determined by probability values of less than $p < .05$.

RESULTS

Descriptive Results

Table 2 depicts the frequency results of transfer students' social demographics by racial/ethnic category. For both groups, more women were in the sample. Sixty percent of non-white students and 58.5% of white students were female. In terms of students' average age, white students ($M = 25.89$) were significantly older than non-white ($M = 24.51$) students at $p < .001$. In terms of students' place of residence, a higher percentage of non-white students lived in residence halls (13.9% versus 5.9%) and in on-campus apartments (18.4% versus 15.5%) than white students. Conversely, more white students lived in an off-campus apartment (44.2% versus 42.1%) or with parents or relatives (31% versus 24.9%).

When comparing the educational attainment level of parents, non-white students were more likely to have fathers who completed the bachelor's degree (19.2% versus 15%) compared to white students. On the other hand, a higher percentage of white students had fathers who completed a graduate degree (30.6% versus 8.8%). This pattern is similar among mothers. White students were more likely to have mothers who completed an education beyond a two-year degree, including those who obtained a graduate degree (14.1% versus 5%).

In terms of students' reported parental income, white students were more likely to have parents who are in the higher income brackets. That is, about 31% of white students had an income between \$40,000-\$74,000, compared to 21% of non-white students. Further, about a

fourth of white students had parents who earned \$75,000 or more, compared to 14.9% of non-white students.

Both groups responded similarly to the degree aspiration question. Specifically, over a third of non-white and white students indicated that the master's degree was the highest degree planned. Over a fourth of white students indicated that the doctorate was the highest degree planned compared to 18% of non-white students.

Community College Experiences

Table 3 shows the mean differences between non-white and white students on several community college experiences. In terms of academic performance, white students had a significantly higher GPA ($M = 3.45$ versus $M = 3.37$, $p < .01$) than non-white students. Further, white students worked more hours on a job for pay while they were students at the community college. This finding was also statistically significant. Conversely, non-white students spent significantly more hours per week on the college campus ($M = 3.32$ versus ($M = 3.04$, $p < .05$) compared to white students.

General Perceptions at Community Colleges

There were five meaningful factors that emerged from the factor analysis. The factors measure students' general perceptions of courses, academic counseling, Transfer Center, activities prior to transferring, and perceptions of the four-year university (see Appendix A for a description of the variables that comprise each factor). The responses were based on a four-point scale (1=disagree strongly; 2=disagree somewhat; 3=agree somewhat; 4=agree strongly).

Table 4 depicts the mean differences on community college general perception factors by racial/ethnic category (i.e., white versus non-white). Of the five factors under general perceptions, two statistically significant differences were found on the Transfer Center and perceptions of four-year university factors favoring non-white students. That is, non-white students had significantly more agreement that they utilized the services of the Center, the Center was helpful in providing valuable information about transfer, the staff was responsive to students' needs and requests, and the Center sponsored information fairs/sessions for prospective students. In terms of students' perceptions of the four-year university, non-white students had significantly more agreement that they felt overwhelmed about being at a large university, felt uncomfortable about being in large lecture classes, felt insecure about making new friends, and felt lack of confidence about the new challenges of the university.

Students' Quality of Effort at Community College

In an effort to better understand transfer students at the University, four Quality of Effort scales were included in the TSQ (see Appendix A). A comparative analysis of non-white and white students was conducted on the four Quality of Effort scales. The scales included: (1) experiences with faculty; (2) experiences with clubs and organizations; (3) course learning; and (4) experience in writing.

Of the four Quality of Effort scales, the results revealed statistically significant differences on two dimensions. White students scored significantly higher on experiences with faculty and course learning. In general, white students had more involvement and interaction with faculty than non-white students. They were more likely to spend time talking with a faculty

member and to discuss their academic performance or assignments. Further, white students spent more time thinking about the class material outside of class and processed the information at higher levels by teaching other students or doing additional readings.

University Experiences

A statistically significant difference was found between the mean fourth-quarter GPA of non-white ($M = 3.04$ versus $M = 3.28$, $p < .001$) and white students. In general, non-white students were slightly more likely to work between 16 to 20 hours or less than white students. Conversely, a higher percentage of white students worked 21 to 30 hours per week. Slightly more white students (71% versus 65.2%) responded "yes" that they attended the summer orientation session for transfers. Twice as many non-white students (14.5% versus 7.4%) responded that they participated in a Transfer Summer Program.

More non-white students indicated that they majored in Engineering and Applied Math (6.1% versus 3.2%), Physical Sciences (12.9% versus 6.9%), and Social Sciences (44.2% versus 40.4%). Conversely, more white students majored in Humanities (23.8% versus 17.8%) and Life Sciences (23.8% versus 17.8%).

Table 5 shows the mean differences between non-white and white students on the items that probe students' reasons for attending the University. Nine of the 14 items were statistically significant. Non-white students were more likely to indicate the following reasons were important for attending the University: teacher and academic counselor at two-year advised me, social activities reputation, received financial aid, ranking in national magazines, university representative recruited me, and parents recommended that I attend. Conversely, white students

were more likely to state that an important reason for attending the University was the notion that graduates gain admission to top graduate/professional schools.

Table 6 reports the statistically significant differences in students' weekly involvement activities at the University by racial/ethnic category. Students were asked to indicate how many hours they spent weekly doing social, academic, extra-curricular, and other activities.

Significantly more non-white students indicated that they spent time in student clubs or groups compared to white students ($M = 1.93$ versus $M = 1.72$, $p < .05$). Conversely, white students were more likely to spend time socializing with friends ($M = 4.35$ versus $M = 4.12$, $p < .05$), participating in exercise or sports ($M = 3.36$ versus $M = 2.95$, $p < .001$), partying ($M = 2.65$ versus $M = 2.21$, $p < .001$), and doing independent research ($M = 2.41$ versus $M = 2.09$, $p < .05$). These differences were all statistically significant.

Students' Quality of Effort at the University

Three Quality of Effort scales were used to investigate students' level of involvement and quality of effort in their academic and social experiences at the University (see Table 7). The three scales included: (1) experiences with faculty; (2) experiences with clubs and organizations; and (3) experience in course learning (see Appendix A). Of the three factors, white students scored significantly higher on the experiences with faculty and course learning dimensions. The experiences with faculty scale measured the extent to which students spent time outside of class interacting with faculty at the University. Compared to non-whites, white students had significantly higher levels of involvement with faculty. The experiences with course learning scale measures the extent to which students spend quality time in course preparation, level of

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participation in class discussions, and additional work outside of class. Compared to non-whites, white students were more likely to take detailed notes in class, participate in class discussions, and try to explain the material to another student or friend. The experiences with clubs and organizations scale measures students' level of involvement and quality of effort with campus clubs and organizations. A statistically significant difference was found on this factor favoring non-white students. They were more likely to attend a program or event, read or ask about a club or organization, or attend a meeting of a club or student government.

The academic counseling factor included statements about the extent to which students utilized serviced offered by academic counseling in various departments at the University. Non-white students scored significantly higher on this factor, compared to white students. That is, non-white students were more likely to utilize services offered by culturally-based programs.

General Perceptions of the University

Table 7 reports four factors that address the general perceptions of students at the University: satisfaction about the University, perceptions of faculty, stigma as transfer student, and competition and survival skill (see Appendix A). Non-whites scored significantly higher on two of the four factors. That is, non-whites were more likely to feel a stigma of having been a transfer student and that students and faculty tend to underestimate their ability. Further, they were likely to have significantly more agreement on the competition and survival culture factor. This factor is characterized by statements: there is a competitive nature among students, students are more concerned about "getting the grade" instead of learning the material, students feel like they do not "fit in" on this campus, and students are treated like "numbers in a book."

Adjustment Process

Three factors emerged that measure students' overall adjustment process: psychological, academic and social (see Appendix A). According to Table 7, non-white students scored significantly higher on the psychological and academic dimensions, whereas whites scored higher on the social adjustment factor. In other words, non-whites had more agreement that they felt overwhelmed by the size of the student body, agreed that large classes were intimidating, felt alienated at the University upon transferring, and experienced difficulty finding their way around campus. In terms of academic adjustment, non-whites were more likely to agree that adjusting to the standards or expectations has been difficult, experienced a dip in grades during the first or second quarter, level of stress increased when they started the University, and experienced difficulty going from a semester to a quarter system. For white students, they were less likely to experience difficulty adjusting socially. That is, white students had more agreement that they were meeting as many people and making as many friends as they would like, it was easy to make friends, and they were very involved with social activities.

DISCUSSION AND CONCLUSION

An important aspect of this study was to assess the college experiences of non-white and white transfer students at a major Research University. In terms of students' parental educational level, proportionately, more white students had parents who obtained graduate degrees than did non-white students. Further, white students were more likely to have parents who had incomes above \$40,000, respectively. The findings suggest that non-white students are

more likely to come from lower socio-economic status as measured by parents' education and income levels compared to white students.

In the community college environment, white students had a slightly higher GPA (3.45 versus 3.37) than non-white students. Also, white students worked significantly more hours at a job for pay. Non-white students were more likely to spend time on the college campus. In terms of students' weekly activities at the two-year college, white students spent significantly more time engaging in exercise or sports and doing independent research compared to non-white students.

In measuring students' general perceptions of the two-year environment, non-white students had significantly more agreement that they utilized the services of the Transfer Center and felt that the Center was helpful in providing valuable information about transferring. Since non-white students tend to have parents with lower educational attainment levels, the Transfer Center may serve as a critical source for obtaining information about the transfer process and expectations about the University. Further, with a limited network of resources, perceiving the services of the Center is heightened as non-white students may realize the value and opportunities available to them.

Non-white students had more agreement that they felt overwhelmed about being at a large university, uncomfortable about being in large lecture classes, and insecure about making new friends at the university. Because non-white students are likely to be the first to attend college, they may possess feelings of insecurity about the expectations of the university. For the remaining three dimensions, both non-white and white students were similar in their experiences with courses, academic counseling, and activities prior to transfer.

There were four dimensions that measured the quality of effort of students at the community college. White students scored significantly higher in their experiences with faculty and course learning. That is, white students had more involvement with faculty outside of class and would more often seek their advice on class projects and writing assignments. This finding suggests that white students were more likely to feel comfortable approaching faculty or that they feel it was important to seek their assistance or advice. For the remaining two quality of effort scales, both white and non-white students were similar on the clubs and organizations and experience in writing dimensions.

In comparing students' experiences at the University, white students had a significantly higher GPA (3.28 versus 3.04) than non-white students. White students' academic achievement is consistently higher at both the two-year college and at the four-year university. Similar to their experience in the two-year environment, more white students reported working between 21-30 hours per week at the University. In terms of students' academic majors, a higher percentage of non-white students indicated that their majors were in engineering and applied math (6.1% versus 3.2%), physical sciences (12.9% versus 6.9%), and social sciences (44.2% versus 40.4%), respectively. Conversely, white students had higher responses in humanities and life sciences.

A series of questions were included to measure students' reasons for attending the University. The significant findings suggest that there were many reasons that influenced non-white students to attend the University, including teachers and academic counselors at the two-year college, friends, and parents. Moreover, being offered financial aid was an important reason for their decision. These findings suggest that for non-white students, external factors play a major role in the extent to which these students decide to transfer to a four-year university. At

the community college, teachers and counselors can have a negative or positive impact on a student's decision to transfer. Non-white students who develop relationships with faculty and counselors are likely to seek out their assistance and advice on educational issues. Further, having a support network at the college, outside of family, will likely play an integral role in a student's development, both academically and psychologically. When students are aware that faculty and other student affairs professionals have confidence in their abilities, these are positive reinforcement that have lasting impact on an individual. Not surprisingly, financial aid was an important factor in non-white students' decision to attend the University. Economics will continue to be an issue for students and may often serve as a barrier for pursuing higher education. Students who learn the intricate details about financial aid prior to transferring are likely to be prepared and be confident in affording an education.

Only one reason was statistically significant for white students: to gain admission to top graduate/professional schools. The findings suggest that for white students, coming to the University is a springboard for their eventual aspiration to pursue graduate school. Because the University is recognized as an elite institution of higher education in the world, students believe that a diploma from this University will have the cache in the admissions decision of graduate and professional schools.

In examining students' quality of effort at the University, non-white students had significantly higher involvement in clubs and organizations and academic counseling dimensions. That is, they were more likely to spend time participating in campus clubs or student organizations compared to white students. Further, non-white students were more likely to meet with academic counselors on a regular basis and utilize services offered to them. This

behavior among non-white students is repeated at the university. Again, when these students arrive at the university, they can be easily overwhelmed with the institutional culture and campus climate. Services offered by programs targeting underrepresented groups play a critical role in providing a connection between services and students' needs. The research show that students from lower socioeconomic status, poorer understanding of the higher education system and language problems are factors that may exacerbate their adjustment process. These programs can provide these students extensive services, from tutoring, counseling, and workshops.

On the other hand, white students were more likely to meet with faculty outside of class and to seek their assistance with class projects and writing assignments. They were also more comfortable approaching faculty outside of class compared to non-white students. Further, white students had higher effort and involvement in course learning, in that, they took detailed notes and made outlines from class notes and readings. An important observation to make is that white students had a high quality of effort in their experiences with faculty and course learning at the two-year college, and this behavior continued at the four-year university. This finding suggests that white students are more likely to continue their interaction and involvement with faculty at the University and their approach in their courses.

For students' general perceptions of the University, non-white students had significantly more agreement about the stigma of being a transfer, and competition and survival culture dimension. In other words, non-white students were more likely to agree that because they were transfer students, faculty and students tend to underestimate their abilities. Further, they were more likely to agree that there is a competitive nature among students at the University and that students are more concerned about "getting the grade" instead of learning the material. A

possible explanation is that non-white students may feel a sense of inferiority about their academic abilities. The survey, which was used to collect information from students, does not enable the researcher to determine why students started at the community college. Although there tends to be a high proportion of non-white students in community colleges, it is possible that because there can be a negative stereotype of having attended a community college, non-white students may feel a sense of insecurity or lack of confidence. Further investigation will need to be conducted to explore possible explanations.

In examining students' adjustment process at the University, non-white students had significantly more agreement on two dimensions: psychological and academic. That is, non-white students were more likely to agree that they felt overwhelmed by the size of the student body, that large classes intimidated them, that they felt alienated at the University, that they experienced difficulty adjusting to the academic standards at the University, and that going from a semester to a 10-week quarter system was not easy. Conversely, white students at the University were more likely to agree that adjusting to the social environment was not difficult. Further, white students were more likely to agree that they were meeting as many people and making as many friends as they would like at the University.

In summary, non-white students are likely to have different experiences both at the two- and four-year environment. Prior to transferring, non-white students were significantly more likely to have insecure feelings about the university environment. A possible explanation for this may be that non-white students are likely to be first-generation students and that attending college is a new experience for the student and his/her family. Therefore, because there is no familiarity with the expectations of college, the adjustment process for non-white students will

be greater. For white students, they had higher quality of effort at the two- and four-year in their experiences with faculty and course learning. They were more likely to have greater involvement interacting with faculty in and out-of-class and in their approach to their course learning compared to non-white students. Because the non-white group was collapsed to include diverse racial/ethnic categories, it is impossible to generalize across the non-white group in regard to the effect of language barriers or to students' effort or involvement. However, the overall findings between white and non-white students suggest that they will likely have different experiences at the community college and the university.

CONCLUSION

This study provides valuable information about transfer students' experiences by racial/ethnic category. Although the non-minority groups were collapsed into one category, interesting findings emerged. The non-white group differed from the white group in numerous areas. At the community college, white students tended to perform significantly higher in their academics as measured by GPA. They were also likely to have higher quality of effort in their experiences with faculty and in course learning. Since white students in the sample come from parents with higher education attainment levels, it is possible that these students are more familiar with the college experience. Conversely, since a large proportion of non-white students are first-generation college students, the transition and experience will be very different because of the unfamiliarity and new expectations of college.

While white students have significantly higher GPAs both at the two- and four-year, non-white students are performing successfully when they arrive at the University. These students

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were accepted into the University because of their academic record and their potential to be successful at the four-year institution. At the university, there were significant differences in their academic and social involvement. Non-white students spent a lot of time and effort in clubs and organizations and academic counseling. White students, however, had higher quality of effort in experiences with faculty and course learning. At the University, there are numerous student-run organizations that provide peer and academic counseling. In the wake of post Proposition 209 (legislation that eliminated the use of race/ethnicity in college admissions, financial aid, and hiring practices in California), these types of organizations are threatened because of the target populations served. At a major public university in California, it is critical that students of color have available to them services and campus retention programs. These programs are places where these students feel comfortable in seeking the services important to them. Without these services students will likely not do as well. At these programs, students have opportunities to interact with fellow students, and to meet students who share similar experiences. This is important because the research that focuses on student persistence shows that students who have higher levels of integration, social and academic, are likely to be more satisfied with their college experience and will persist toward graduation (Astin, 1984; Tinto, 1975, 1986).

In terms of students' adjustment process, non-white students are more likely than whites to experience difficulty in their psychological and academic adjustments. Since non-white students are likely to be first generation, they will experience greater adjustment when they arrive at the University. For these students to be better prepared, it is important that they learn about the expectation and institutional climate of a four-year university. Students should be

encouraged to visit the campus, talk to former transfers, and be exposed to the classroom environment. Easing the transfer process for students can be achieved if students not only rely on information given by counselors and faculty at the two-year college, but also be proactive and seek out information.

IMPLICATIONS FOR PRACTICE

A wave of research on transfers at the four-year institution has focused on students' academic adjustment process as measured by GPA. The intent of this study was to move beyond the "transfer shock" concept by building on previous works in an effort to establish new methods, concepts, and frameworks to better understand and characterize the complex transfer process of community college students at the university. This study, however, will add to the research literature because it operationalizes the complex adjustment process beyond academics to encompass the social and psychological aspects of this process. Finally, this study contributes to the research literature, and in particular, to the body of knowledge relating to studies focusing on the diverse backgrounds of undergraduates at a large, public, urban, Research I university.

REFERENCES

- Allen, W. (1981). Correlates of black student adjustment, achievement, and aspirations at a predominately white Southern university. In G. D. Thomas (Ed.), *Black students in higher education: Conditions and experiences in the 1970s*, 126-141. Westport, CT: Greenwood Press.
- Allen, W. (1985). Black student, white campus: Structural, interpersonal, and psychological correlates of success. *Journal of Negro Education*, 54, 134-147.
- Allen, W. (1988). The education of black students on white college campuses: What quality the experience? In M. T. Nettles (Ed.), *Toward black undergraduate student equality in American higher education*, 57-85. Westport, CT: Greenwood Press.
- American Association for Community Colleges. (1997). National profile of community colleges. Trends & Statistics 1997-1998. Washington, D.C.: Community College Press.
- Asamen, J. K., and Berry, G. L. (1987). Self-concept, alienation, and perceived prejudice: Implications for counseling Asian Americans. *Journal of Multicultural Counseling and Development*, 3, 146-159.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 297-308.
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass Publishers.
- Baker, R. W., and Siryk, B. (1986). Exploratory intervention with a scale measuring adjustment to college. *Journal of Counseling Psychology*, 33(1), 31-38.
- Bean, J. P. (1980). Dropouts and turnover. A synthesis and test of a causal model of student attrition. *Research in Higher Education*, 12, 155-187.
- Bean, J. P. (1982). Student attrition, intentions, and confidence: Interaction effects in a path model. *Research in Higher Education*, 17, 291-319.
- Bean, J. P. (1983). The application of a model of turnover in work organizations to the student attrition process. *Review of Higher Education*, 6, 129-148.
- Best, G., and Gehring, D. (1993). The academic performance of community college transfer students at a major state university in Kentucky. *Community College Review*, 21(2), 32-41.

- Cabrera, A. F., and Nora, A. (1994). College students' perceptions of prejudice and discrimination and their feelings of alienation. *Review of Education, Pedagogy, and Cultural Studies*, 16, 387-409.
- Cejda, B. (1994). Reducing transfer shock through faculty collaboration: A case study. *Community College Journal of Research and Practice*, 18(2), 189-199.
- Chew, C. A., and Ogi, A. Y. (1987). Asian American college student perspectives. In D. J. Wright (Ed.), *Responding to the needs of minority students*. New Directions for Student Services, 38, 39-48. San Francisco: Jossey-Bass.
- Cresswell, J. W. (1994). *Research design. Qualitative & quantitative approaches*. Thousand Oaks, CA: Sage Publications.
- Diaz, P. (1992). Effects of transfer on academic performance of community college students at the four-year institution. *Community College Journal of Research and Practice*, 16(3), 279-291.
- Eimers, M. T., and Pike, G. R. (1997). Minority and nonminority adjustment to college: Differences or similarities? *Research in Higher Education*, 38(1), 77-97.
- Graham, S. W., and Hughes, J. A. (1994). Moving down the road: Community college students' academic performance at the university. *Community College Journal of Research and Practice*, 18(5), 449-464.
- Hill, J. (1965). Transfer shock: The academic performance of the junior college transfer. *Journal of Experimental Education*, 33, 201-216.
- Hurtado, S., Carter, D. F., and Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education*, 37(2), 135-157.
- Justiz, M. J., and Rendon, L. I. (1989). Hispanic students. In M. L. Upcraft, J. N. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college*, 261-276. San Francisco: Jossey-Bass.
- Keeley, E. J., and House, J. D. (1993). Transfer shock revisited: A longitudinal study of transfer academic performance. Paper presented to the Annual Forum of the Association for Institutional Research. Chicago, IL. May 16-19, 1993.
- Laanan, F. S. (1996). Making the Transition: Understanding the adjustment process of community college transfer students. *Community College Review*, 23(4), 69-84.

- Laanan, F. S. (1998). Beyond Transfer Shock: A study of students' college experiences and adjustment processes at UCLA. Unpublished doctoral dissertation. University of California, Los Angeles. Graduate School of Education and Information Studies.
- Loo, C. M., and Rolison, G. (1986). Alienation of ethnic minority students at a predominately white university. *Journal of Higher Education*, 57, 58-77.
- Madrado-Peterson, R., and Rodriguez, M. (1978). Minority students' perception of a university environment. *Journal of College Student Personnel*, 19(3), 259-263.
- Malaney, G. D., and Shively, M. (1995). Academic and social expectations and experiences of first-year students of color. *NASPA Journal*, 33(1), 3-18.
- Mow, S. L., and Nettles, M. T. (1990). Minority student access to, and persistence and performance in college: A review of the trends and research literature. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research*, Vol. VI, 35-105. New York: Agathon Press.
- Munoz, D. G. (1986). Identifying areas of stress for Chicano undergraduates. In M. A. Olivas (Ed.), *Latino college students*, 131-156. New York: Teachers College Press.
- Olivas, M. A. (1986). Introduction - Research on Hispanic college students: A theoretical framework and inquiry. In M. A. Olivas (Ed.), *Latino college students*, 1-25. New York: Teachers College Press.
- Pace, C. R. (1980). Measuring the quality of student effort. *Current Issues in Higher Education*, 2, 10-16.
- Pace, C. R. (1984). Measuring the quality of college student experiences. Los Angeles: UCLA Center for the Study of Evaluation.
- Pace, C. R. (1990). College student experiences questionnaire. Third Edition. Los Angeles: UCLA Center for the Study of Evaluation.
- Pace, C. R. (1992). College student experiences questionnaire: Norms for the third edition, 1990. Los Angeles: UCLA Center for the Study of Evaluation.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Higher Education*, 63, 603-618.
- Tinto, V. (1986). Theories of student departure revisited. In J. Smart (ed.), *Higher Education: Handbook of Theory and Research*, Volume II, 359-384. New York: Agathon Press.

Table 1
Reliability Coefficients of Community College and University Factors

Factor Name	Description	Alpha	# of Items
<u>Community College Factors</u>			
<u>Quality of Effort</u>			
CCFACULT	Discussions with Faculty	.92	12
CCCLUBS	Participation in clubs and organizations	.94	10
CCCRSLRN	Integration and discussion of course topics	.83	9
CCWRITE	Discussions of written work with faculty	.81	8
<u>General Perceptions</u>			
CCCOURSE	Courses at two-year	.89	7
CCCOUNSL	Experience with academic counselors	.88	7
CCTRNCTR	Transfer Center	.92	4
CCACTIV	Involvement activities prior to transferring	.68	4
CCPERCP	Perceptions of four-year prior to transferring	.72	4
<u>University Factors</u>			
<u>Quality of Effort</u>			
UCFACULT	Discussions with faculty	.94	9
UCCLUBS	Participation in clubs and organizations	.90	8
UCCRSLRN	Integration and discussion of course topics	.82	8
<u>General Perceptions</u>			
UCSATIS	Overall satisfaction with University	.88	4
UCFACPER	Perceptions of Faculty	.84	4
UCSTIGMA	Stigma as transfer student	.86	3
UCCOMPTE	Competition and survival culture	.66	4
<u>Adjustment Process</u>			
UCPSYCHO	Psychological adjustment	.75	4
UCACAADJ	Academic adjustment	.71	5
UCSOCADJ	Social Adjustment	.69	4

Table 2
Frequency of Transfer Students' Social Demographics by Racial/Ethnic Category
(N=696)

Variable	Racial/Ethnic Category		Diff.*
	Non-White	White	
	(n=330)	(n=366)	
<i>Gender</i>			
Percent Female	60.0	58.5	+1.5
<i>Age of Students</i>			
Mean	24.51	25.89	-1.38
<i>Place of Residence</i>			
Residence Hall/Campus Housing	13.9	5.9	+8.0
Fraternity/Sorority House	0.9	3.4	-2.5
On-Campus Apartment	18.4	15.5	+2.9
Off-Campus Apartment	42.1	44.2	-2.1
With parents or relatives	24.9	31.0	-6.1
<i>Parental Educational Level</i>			
<i>Father</i>			
Elementary school or less	12.1	6.4	+5.7
Some high school	14.0	6.6	+7.4
High school graduate	16.3	18.8	-2.5
Some college	20.2	16.8	+3.4
Associate's degree from two-year	4.9	2.9	+2.0
Bachelor's degree	19.2	15.0	+4.2
Some graduate school	4.6	2.9	+1.7
Graduate degree	8.8	30.6	-21.8
<i>Parental Educational Level</i>			
<i>Mother</i>			
Elementary school or less	18.7	4.8	+13.9
Some high school	9.3	7.6	+1.7
High school graduate	24.3	29.1	-4.8
Some college	17.4	20.1	-2.7
Associate's degree from two-year	8.4	7.6	+0.8
Bachelor's degree	15.0	14.1	+0.9
Some graduate school	1.9	2.5	-0.6
Graduate degree	5.0	14.1	-9.1

*Difference is calculated by subtracting white percentage from non-white percentage. A positive percent difference indicates a higher percentage of non-white students.

Table 2 (continued)
Frequency of Transfer Students' Social Demographics by Racial/Ethnic Category
(N=696)

Variable	Racial/Ethnic Category		Diff.*
	Non-White	White	
	(n=330)	(n=366)	
<i>Reported Parental Income</i>			
Less than \$14,999	19.9	14.7	+5.2
\$15,000 - \$24,999	17.7	8.4	+9.3
\$25,000 - \$39,999	25.3	19.2	+6.1
\$40,000 - \$59,999	13.3	19.2	-5.9
\$60,000 - \$74,999	8.9	12.3	-3.4
\$75,000 or more	14.9	26.1	-11.2
<i>Highest Academic Degree Planned</i>			
Bachelor's	16.2	14.6	+1.6
Master's	38.1	31.0	+7.1
Doctorate	18.3	25.8	-7.5
Medical	11.0	13.2	-2.2
Law	15.2	14.0	+1.2
Other	1.2	1.4	-0.2

*Difference is calculated by subtracting white percentage from non-white percentage. A positive percent difference indicates a higher percentage of non-white students.

Table 3
Mean Differences of Community College Experiences by Racial/Ethnic Category
(N=696)

Community College Experiences	Racial/Ethnic Category		<i>t</i>	df
	Non-White (n=330)	White (n=366)		
Community college GPA	3.37 (3.60)	3.45 (3.49)	-2.78**	692
Obtained Associate Degree ¹	.43 (.50)	.42 (.49)	.25	694
Participated in Honors Program ²	.10 (.30)	.23 (.42)	-4.66***	662.44
Hours per week spent on college campus, not including classes. ³	3.32 (1.64)	3.04 (1.56)	2.36*	677.02
Hours per week spent studying or preparing for class. ⁴	2.70 (1.33)	2.68 (1.25)	.22	692
Hours working on a job for pay. ⁵	3.66 (1.73)	3.94 (1.69)	-2.17*	691

M and (SD). * $p < .05$; ** $p < .01$; *** $p < .001$

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¹ Yes/No

² Yes/No

³ Response based on 6-point scale (1=none; 2=1 to 3 hours; 3=4 to 6 hours; 4=7 to 9 hours; 5=10 to 12 hours; 6=more than 12 hours).

⁴ Response based on a 5-point scale (1=1 to 5 hours; 2=6 to 10 hours; 3=11 to 15 hours; 4=16 to 20 hours; 5=more than 20 hours).

⁵ Response based on a 6-point scale (1=none. I didn't have job; 2=1 to 10 hours; 3=11 to 15 hours; 4=16 to 20 hours; 5=21 to 30 hours; 6=more than 30 hours).

Table 4
Mean Differences on Community College Factors by Racial/Ethnic Category
(N=696)

Factors	Racial/Ethnic Category		<i>t</i>	df
	Non-White (n=330)	White (n=366)		
<i>General Perceptions</i>				
Experiences with courses++	20.18 (4.75)	20.26 (4.78)	-.23	685
Academic counseling++	21.85 (5.21)	21.48 (5.40)	.91	680
Transfer Center++	11.34 (3.81)	9.79 (4.27)	4.81***	612.24
Activities prior to transferring++	8.30 (3.15)	8.04 (3.20)	1.07	690
Perceptions of four-year++	9.71 (3.01)	8.48 (3.14)	5.27***	688
<i>Quality of Effort</i>				
Experiences with Faculty+	26.54 (8.01)	28.80 (8.64)	-3.54***	683
Clubs and Organizations+	18.46 (8.17)	17.55 (8.23)	1.47	684
Course Learning+	27.18 (5.23)	28.96 (5.06)	-4.55***	688
Experience in Writing+	25.07 (4.93)	25.31 (4.77)	-.66	688

M and (SD). * $p < .05$; ** $p < .01$; *** $p < .001$

+ Never to Very often

++ Disagree strongly to Agree strongly

Table 5
Mean Differences of Reasons for Attending University by Racial/Ethnic Category
(N=696)

Reasons for Attending University	Racial/Ethnic Category		<i>t</i>	df
	Non-White (n=330)	White (n=366)		
My teacher advised me.	1.72 (.90)	1.59 (.88)	1.96*	689
Social activities reputation.	2.25 (1.12)	1.87 (1.03)	4.63***	669.26
Offered Financial Aid.	2.35 (1.24)	1.95 (1.17)	4.35***	670.02
Academic counselor(s) at two-year advised me.	1.78 (.97)	1.62 (.93)	2.24*	690
A friend suggested attending.	1.85 (1.07)	1.62 (.96)	2.87**	655.52
A university representative recruited me.	1.35 (.73)	1.17 (.53)	3.66***	582.45
Graduates gain admission to top Graduate/professional schools.	2.78 (1.12)	2.99 (1.07)	-2.38*	674
Ranking in national magazines.	2.85 (1.12)	2.64 (1.17)	2.42*	687.48
Parents recommended that I attend.	2.17 (1.21)	1.90 (1.13)	2.99**	666.67

M and (SD). * $p < .05$; ** $p < .01$; *** $p < .001$

Note: Responses were based on a 4-point scale (1=*not important*; 2=*somewhat important*; 3=*important*; 4=*very important*).

Table 6
Mean Differences in University Weekly Activities by Racial/Ethnic Category
(N=696)

Activity	Racial/Ethnic Category		<i>t</i>	df
	Non-White (n=330)	White (n=366)		
Socializing with friends	4.12 (1.60)	4.35 (1.57)	-1.94*	689
Exercise or sports	2.95 (1.41)	3.36 (1.47)	-3.73***	689
Partying	2.21 (1.49)	2.65 (1.62)	-3.68***	687.53
Student clubs/groups	1.93 (1.36)	1.72 (1.26)	2.11*	688
Doing independent research	2.09 (1.60)	2.41 (1.76)	-2.51*	687

M and (SD). * $p < .05$; ** $p < .01$; *** $p < .001$

Note. Responses were based on an 8-point scale (1=*none*; 2=*less than 1 hour*; 3=*1-2 hours*; 4=*3-5 hours*; 5=*6-10 hours*; 6=*11-15 hours*; 7=*16-20 hours*; 8=*over 20 hours*).

Table 7
Mean Differences on University Factors by Racial/Ethnic Category
(N=696)

Factors	Racial/Ethnic Category		<i>t</i>	df
	Non-White (n=330)	White (n=366)		
<i>Quality of Effort</i>				
Experiences with Faculty+	21.03 (7.37)	22.85 (7.29)	-3.23***	683
Clubs and Organizations+	15.71 (6.97)	14.36 (6.55)	2.64**	691
Course Learning+	25.04 (4.79)	25.91 (4.43)	-2.48*	682
Academic Counseling+	8.60 (2.63)	7.72 (2.56)	4.47***	684
<i>General Perceptions</i>				
Satisfaction about University++	13.50 (2.77)	13.77 (2.69)	-1.29	677
Perceptions of faculty++	9.45 (2.97)	9.14 (3.09)	1.33	675
Stigma as transfer student++	5.99 (2.45)	5.58 (2.62)	2.10*	663.38
Competition and survival culture++	15.80 (2.29)	15.45 (2.48)	1.93*	669
<i>Adjustment</i>				
Psychological adjustment++	9.38 (2.94)	8.34 (3.04)	4.56***	689
Academic adjustment++	15.39 (3.21)	14.43 (3.64)	3.67***	680.80
Social adjustment++	8.92 (2.78)	9.44 (2.83)	-2.44*	685

M and (SD). * $p < .05$; ** $p < .01$; *** $p < .001$

+ Never to Very often

++ Disagree strongly to Agree strongly

Community College Experiences

Appendix A.1: CCFACULT

<i>EXPERIENCES WITH FACULTY</i> ($\alpha = .92$)	Factor Loading
Visited faculty and sought their advice on class projects such as writing assignments and research papers.	.73
Felt comfortable approaching faculty outside of class.	.69
Talked with a faculty member.	.76
Asked my instructor for information related to a course I was taking (grades, make-up work, assignments)	.74
Visited informally and briefly with an instructor after class.	.80
Made an appointment to meet with a faculty member in his/her office.	.78
Discussed ideas for a term paper or class project with a faculty member.	.77
Discussed my career plans and ambitions with a faculty member.	.75
Asked an instructor for comments and criticisms about my work.	.78
Had coffee, cokes, or snacks with a faculty member.	.65
Worked with a faculty on a research project.	.47
Discussed personal problems or concerns with a faculty member.	.60

Appendix A.2: CCCLUBS

<i>CLUBS AND ORGANIZATIONS</i> ($\alpha = .94$)	Factor Loading
Held an office in a club, organization, or student government.	.81
Looked in the student newspaper for notices about campus events and student organizations	.68
Attended a program or event put on by a student group.	.83
Read or asked about a club, organization, or student government activity.	.83
Attended a meeting of a club, organization, or student government group.	.85
Voted in a student election.	.68
Discussed policies and issues related to campus activities and student government.	.78
Worked in some student organization or special project (publications, student govt., social event, etc.)	.84
Discussed reasons for the success or lack of success of student club meetings, activities, or events.	.85
Met with a faculty advisor or administrator to discuss the activities of a student organization	.80

Community College Experiences (continued)

Appendix A.3: CCCRSLRN

<i>COURSE LEARNING</i> ($\alpha = .83$)	Factor Loading
Took detailed notes in class	.54
Participated in class discussions.	.65
Tried to see how different facts and ideas fit together.	.79
Thought about practical applications of the material.	.76
Worked on a paper or project where I had to integrate ideas from various sources.	.64
Summarized major points and information in my readings or notes.	.65
Tried to explain the material to another student or friend.	.63
Made outlines from class notes or readings.	.49
Did additional readings on topics that were introduced and discussed in class.	.54

Appendix A.4: CCWRITE

<i>EXPERIENCE IN WRITING</i> ($\alpha = .81$)	Factor Loading
Used a dictionary or thesaurus to look up the proper meaning of words.	.52
Consciously and systematically thought about grammar, sentence structure, paragraphs, word choice, and sequence of ideas or points as I was writing.	.56
Wrote a rough draft of a paper or essay and then revised it myself before handing it in.	.72
Spent at least five hours or more writing a paper (not counting time spent in reading or at the library)	.67
Asked other people to read something I wrote to see if it was clear to them.	.60
Referred to a book or manual about style of writing, grammar, etc.	.65
Revised a paper or composition two or more times before I was satisfied with it.	.74
Asked an instructor for advice and help to improve my writing.	.54

Appendix A.5: CCCOURSE

<i>EXPERIENCES WITH GENERAL COURSES</i> ($\alpha = .89$)	Factor Loading
The courses developed my critical and analytical thinking.	.68
The courses demanded intensive writing assignments and projects.	.78
Overall, the courses were intellectually challenging.	.80
The courses prepared me for the academic standards at the University.	.81
The courses prepared me for my major at the University.	.69
The course requirements were demanding.	.82
The course required extensive reading and writing.	.81

Community College Experiences (Continued)

Appendix A.6: CCCOUNSL

<i>EXPERIENCES WITH COUNSELORS ($\alpha = .88$)</i>	Factor Loading
Consulted with academic counselors regarding transfer.	.79
Information received from academic counselor(s) was helpful in the transfer process.	.76
Information helped me take the right courses to complete the transfer articulation agreement (IGETC).	.65
Met with academic counselors on a regular basis.	.77
Talked with a counselor/advisor about courses to take, requirements, education plans.	.84
Make an appointment with a counselor or an advisor to discuss my plans for transferring to a 4-year.	.76
Identified courses needed to meet the general education/major requirements of a 4-year I was interested in attending.	.62

Appendix A.7: CCTRNCTR

<i>TRANSFER CENTER ($\alpha = .92$)</i>	Factor Loading
Utilized services of the Center.	.89
The Center was helpful in providing valuable information about transferring.	.89
The Center staff was responsive to students' needs and requests.	.85
The Center sponsored information fairs/sessions for prospective transfer students.	.83

Appendix A.8: CCACTIV

<i>INVOLVEMENT ACTIVITIES PRIOR TO TRANSFERRING ($\alpha = .68$)</i>	Factor Loading
I visited the 4-year campus to learn where offices and departments were located.	.72
Spoke to academic counselors at the 4-year - transferring and major requirements.	.74
I visited the admissions office at the 4-year.	.74
I sat in on lecture classes in my major.	.62

Community College Experiences (continued)

Appendix A.9: CCPERCP

<i>PERCEPTIONS OF 4-YEAR PRIOR TO TRANSFERRING</i> ($\alpha = .72$)	Factor Loading
I felt overwhelmed about being at a large university with thousands of students.	.85
I felt uncomfortable about being in large lecture classes.	.80
I felt insecure about making new friends at the 4-year university.	.68
I felt confident about the new challenges at the 4-year university.	-.51*

* Item was reverse-coded prior to scaling.

University Experiences

Appendix A.10: UCFACULT

<i>EXPERIENCES WITH FACULTY</i> ($\alpha = .94$)	Factor Loading
Visited faculty and sought their advice on class projects such as writing assignments and research papers	.81
Felt comfortable approaching faculty outside class.	.78
Talked with a faculty member.	.86
Asked my instructor for information related to a course I was taking (grades, make-up work, assignments, etc.)	.78
Visited informally and briefly with an instructor after class.	.79
Made an appointment to meet with a faculty member in his/her office.	.80
Discussed ideas for a term paper or other class project with a faculty member.	.80
Discussed my career plans and ambitions with a faculty member.	.73
Asked my instructor for comments and criticisms about your work.	.78

University Experiences (continued)

Appendix A.11: UCCLUBS

<i>CLUBS AND ORGANIZATIONS ($\alpha = .90$)</i>	<i>Factor Loading</i>
Held an office in a club, organization, or student government.	.72
Read or asked about a club, organization, or student government activity.	.75
Attended a meeting of a club, organization, or student government group.	.79
Voted in a student election.	.58
Discussed policies and issues related to campus activities and student government.	.73
Worked in some student organization or special project (publications, student government, social event, etc.)	.84
Discussed reasons for the success or lack of success of student club meetings, activities, or events.	.86
Met with a faculty advisor or administrator to discuss the activities of a student organization.	.77

Appendix A.12: UCCRSLRN

<i>COURSE LEARNINGS ($\alpha = .82$)</i>	<i>Factor Loading</i>
Took detailed notes in class.	.52
Tried to see how different facts and ideas fit together.	.72
Thought about practical applications of the material.	.73
Worked on a paper or project where I had to integrate ideas from various sources.	.69
Summarized major points and information in my readings or notes.	.73
Tried to explain the material to another student or friend.	.60
Made outlines from class notes or readings.	.63
Did additional readings on topics that were introduced and discussed in class.	.58

Appendix A.13: UCSATIS

<i>SATISFACTION ABOUT UNIVERSITY ($\alpha = .88$)</i>	<i>Factor Loading</i>
I would recommend to other transfers to come to this University.	.87
This University is (was) an intellectually stimulating and often exciting place to be.	.86
If I could start over again, I would go to the same university I am now attending.	.82
I feel (felt) the courses I have taken have been interesting and worthwhile.	.79

University Experiences (continued)

Appendix A.14: UCFACPER

<i>PERCEPTIONS OF FACULTY</i> ($\alpha = .84$)	Factor Loading
Faculty tends to be inaccessible to students.	.87
Faculty are difficult to approach.	.81
Faculty tend to be more interested in their research than spending time with undergraduates.	.78
Professors are strongly interested in the academic development of undergraduates	-.61*

* Item was reverse-coded prior to scaling.

Appendix A.15: UCSTIGMA

<i>STIGMA AS TRANSFER STUDENT</i> ($\alpha = .86$)	Factor Loading
Because I was a "community college transfer," most students tend to underestimate my abilities.	.88
There is a stigma among students for having started at a community college.	.86
Because I was a "community college transfer," most faculty tend to underestimate my abilities.	.84

Appendix A.16: UCCOMPTE

<i>COMPETITION AND SURVIVAL CULTURE</i> ($\alpha = .66$)	Factor Loading
There is a competitive nature among students at the University.	.74
Generally, students are more concerned about "getting the grade" instead of learning the material.	.69
Many students feel like they do not "fit in" on this campus.	.61
Most students are treated like "numbers in a book."	.58

Appendix A.17: UCPSYCHO

<i>PSYCHOLOGICAL ADJUSTMENT</i> ($\alpha = .75$)	Factor Loading
I often feel (felt) overwhelmed by the size of the student body.	.74
The large classes intimidate me.	.77
It is difficult to find my way around campus.	.70
Upon transferring, I felt alienated at this University.	.54

University Experiences (continued)

Appendix A.18: UCACAADJ

<i>ACADEMIC ADJUSTMENT</i> ($\alpha = .71$)	Factor Loading
Adjusting to the academic standards or expectations has been difficult.	.76
I experienced a dip in grades (GPA) during the first and second quarter.	.71
My level of stress increased when I started at the University.	.62
It was difficult going from the semester to the 10-week quarter system.	.61
There is a sense of competition between/among students at this University that is not found in community colleges.	.59

Appendix A.19: UCSOCADJ

<i>SOCIAL ADJUSTMENT</i> ($\alpha = .69$)	Factor Loading
Adjustment to the social environment has been difficult.	-.48*
I am meeting (I've met) as many people and making as many friends as I would like.	.82
It is (was) easy to make friends at this University.	.82
I am (was) very involved with social activities at this University.	.61

* Item was reverse-coded prior to scaling.